

Missouri Assessment Program
Spring 2001

Mathematics
Released Items
Scoring Guide
Grade 8

Session: 1
Item No.: 7
Page No.: 9
Content Standard(s): 2 Geometric/Spatial Sense and Measurement
Process Standard(s): 3.3

Exemplary Response:

- 30

AND

- A similar triangle with the smallest perimeter can be found by using the longest side of triangle ABC and dividing it into 12. This will give you your common ratio of 1: 3. The other two sides of the new similar triangle can be found by multiplying each of the other sides by 3, to get 9. Then the perimeter of the second triangle is $9 + 9 + 12 = 30$.

OR

Other valid explanation/process

Score Points:

2 points Exemplary response
1 point One correct component
0 points Other

Session: 1
Item No.: 9
Page No.: 11
Content Standard(s): 2 Geometric/Spatial Sense and Measurement
Process Standard(s): 1.10

Exemplary Response:

- 3.5 (meters)

AND

- $V = l \times w \times h$
 $9.45 = l \times 1.5 \times 1.8$
 $9.45 = l \times 2.7$
 $9.45 \div 2.7 = l$
 $3.5 = l$

OR

Other valid process

Score Points:

- 2 points Exemplary response
- 1 point Correct process; error in computation
OR
Correct answer only
- 0 points Other

Session: 2
Item No.: 1
Page No.: 2–3
Content Standard(s): 3 Data Analysis, Probability, and Statistics
Process Standard(s): 3.5, 4.1

Exemplary Response:

- Pat's choice:

530 beverages and snacks were sold in the last year. This is more than the 390 beverages and souvenirs sold in the last year. Therefore, I believe that Pat's choice would be the better choice.

OR

- $320 + 210 = 530$ (beverages and snacks)
 $320 + 70 = 390$ (beverages and souvenirs)
 $530 > 390$
So, Pat's choice would be better.

AND

- Lee's choice:

The profit from beverages and souvenirs would be higher, based on year 6, than for beverages and snacks. Therefore, beverages and souvenirs are the better choices since they have the most profit.

AND

- beverages $320 \times 0.50 = \$160.00$
snacks $210 \times 0.75 = \$157.50$
souvenirs $70 \times 2.50 = \$175.00$
So, Lee's choice would be better.

OR

Other valid explanations

Score Points:

Apply the 4-point holistic rubric.

Session: 2
Item No.: 1
Page No.: 2–3
Content Standard(s): 3 Data Analysis, Probability, and Statistics
Process Standard(s): 3.5, 4.1

Score Points:

- 4 points The student's response fully addresses the performance event.
- The response:
- demonstrates knowledge of the mathematical concepts and principles needed to complete the event.
 - communicates all process components that lead to an appropriate and systematic solution.
 - may have only minor flaws with no effect on the reasonableness of the solution.
- 3 points The student's response substantially addresses the performance event.
- The response:
- demonstrates knowledge of the mathematical concepts and principles needed to complete the event.
 - communicates most process components that lead to an appropriate and systematic solution.
 - may have only minor flaws with minimal effect on the reasonableness of the solution.
- 2 points The student's response partially addresses the performance event.
- The response:
- demonstrates a limited knowledge of the mathematical concepts and principles needed to complete the event.
 - communicates some process components that lead to an appropriate and systematic solution.
 - may have flaws or extraneous information that indicates some lack of understanding or confusion.

Session: 2
Item No.: 1
Page No.: 2–3
Content Standard(s): 3 Data Analysis, Probability, and Statistics
Process Standard(s): 3.5, 4.1

1 point The student's response minimally addresses the performance event.

The response:

- demonstrates a limited knowledge of the mathematical concepts and principles needed to complete the event.
- communicates few or no process components that lead to an appropriate and systematic solution.
- may have flaws or extraneous information that indicates lack of understanding or confusion.

0 points Other—Responses not addressed by the Condition Codes:

Examples of "0":

Work consists of copying the prompt information only.
Work indicates no mathematical understanding of the task.